



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,981	07/13/2006	Jordi Tormo i Blasco	5000-0184PUS1	1713

2292 7590 09/09/2008
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

BROOKS, KRISTIE LATRICE

ART UNIT	PAPER NUMBER
----------	--------------

1616

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

09/09/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/585,981	Applicant(s) I BLASCO ET AL.	
	Examiner KRISTIE L. BROOKS	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/13/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application

1. Claims 1-10 are pending.

Claim Rejections - 35 USC § 101/ 112

2. 35 U.S.C. 101 reads as follows:
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 10 provides for the use of compounds I and II, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 10 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under

Art Unit: 1616

35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 12 and 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12 and 16-18 recites "A method wherein the compounds I and II as set forth in claim or the mixture...". The claim does not provide an active method step to distinguish the prior art over the instant invention and does not appear to be in commensurate with what is provided in the specification. The Examiner notes that the claim is interpreted merely as a method of administration.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 1616

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

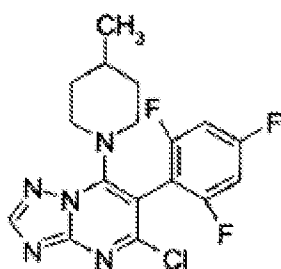
USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

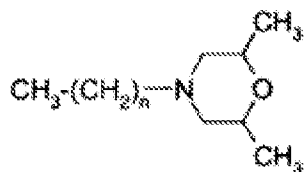
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1 and 3-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pees et al. (US 6,117,876).

Applicant claims a fungicidal mixture for controlling harmful fungi, comprising 1) the triazolopyrimidine derivative of formula I



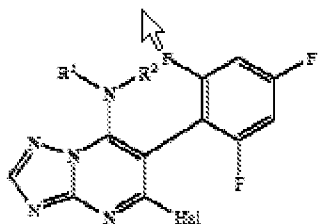
and 2) tridemorph of the formula II



Applicant also claims a method of combating fungi by administering the fungicidal mixture described above.

Determination of the scope and content of the prior art
(MPEP 2141.01)

Pees et al. teach novel compounds of formula I:



wherein R^1 and R^2 each independently represent a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, alkadienyl, haloalkyl, aryl, heteroaryl, cycloalkyl, bicycloalkyl, tricycloalkyl or heterocyclyl group, or R^1 and R^2 together with the interjacent nitrogen atom represent an optionally substituted heterocyclic ring (see the abstract and column 1 lines 1-22).

The compounds of formula I show excellent fungicidal activity against a broad range of fungi (see column 2 lines 40-54). Pees et al. also teaches a method of controlling undesired fungi by contacting said plants with a fungicidally effective amount of the new compounds (see column 2 lines 27-29). The compounds can be prepared into compositions that contain at least one compound of formula I and a solid or liquid carrier (see column 7 lines 45-48 and column 8 lines 1-34). The composition preferably contains 0.5% to 95% by weight of active ingredient (see column 1 lines 56-59). The

Art Unit: 1616

compositions are generally diluted and supplied at a dose that ranges from 0.01 to 10kg a.i./ha (see column 9 lines 35-39). The composition can be applied to a plant, see, soil, or water in which a plant grows (see column 7 lines 60-64). The compositions can contain additional fungicides that have a synergistic effect of the pesticidal activity of the compound of formula I (see column 10 lines 42-50). Examples of additional fungicides include tridemorph (see column 11 line 19).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Pees et al. do not exemplify a composition containing a mixture of the instant triazolopyrimidine derivative of formula I and tridemorph. Pees et al. do not exemplify treating fungi with the fungicidal mixture of formula I.

Finding of prima facie obviousness

Rational and Motivation (MPEP 2142-2143)

One of ordinary skill in the art would have been motivated to prepare a composition containing a mixture of the instant triazolopyrimidine derivative of formula I and tridemorph because Pees et al. suggest that the addition of other fungicides, such as, tridemorph, can broaden the spectrum of activity than the compound of formula I alone and the additional fungicide can have a synergistic effect on the fungicidal activity compound of formula I.

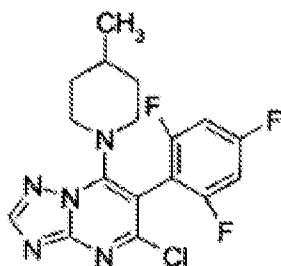
Thus, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made a composition containing a mixture of the instant triazolopyrimidine derivative of formula I and tridemorph because of the enhanced and broadened activity against a variety of undesirable fungi.

Furthermore, although Pees et al. do not exemplify treating fungi with the instant fungicidal mixture, the fungicidal instant fungicidal mixture is known to have a broadened spectrum of activity against fungi as suggested by Pees et al. Thus, it would have been obvious to one of ordinary skill in the art to apply the mixture to undesirable fungi because the combination is known to have excellent activity against a broad range of fungi.

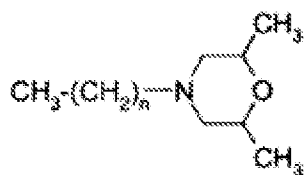
With regard to Applicants claim of synergy, Applicant has provided Table A and Table B on page 10 of the specification which discloses efficacy of a control, compound I and compound II (table A) and also the observed and calculated efficacy of the mixtures of compound I and compound of formula II at a ratio of 4:1, 1:1 and 1:4. Although the mixtures in Examples 4-6 (Table B) does discloses a higher efficacy than the individual compounds, synergy is an unpredictable phenomenon, highly dependent upon specific proportions and/or amounts of particular ingredient and Applicant has only provided data for the mixture at three ratios (e.g. 1:4, 1:1 and 4:1). And thus, applicant has failed to provide evidence of synergism commensurate in scope with the claims.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pees et al. (US 6,117,876) in view of Seele et al. (US 5,229,397)

Applicant claims a fungicidal mixture for controlling harmful fungi, comprising 1) the triazolopyrimidine derivative of formula I



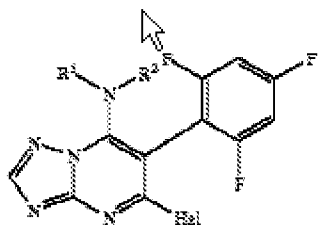
and 2) tridemorph of the formula II



Determination of the scope and content of the prior art

(MPEP 2141.01)

Pees et al. teach novel compounds of formula I:



wherein R^1 and R^2 each independently represent a hydrogen atom or an optionally substituted alkyl, alkenyl, alkynyl, alkadienyl, haloalkyl, aryl, heteroaryl, cycloalkyl, bicycloalkyl, tricycloalkyl or heterocyclyl group, or R^1 and R^2 together with the interjacent nitrogen atom represent an optionally substituted heterocyclic ring (see the abstract and column 1 lines 1-22). The compounds of formula I show excellent fungicidal activity against a broad range of fungi (see column 2 lines 40-54). Pees et al. also teaches a method of controlling undesired fungi by contacting said plants with a fungicidally effective amount of the new compounds (see column 2 lines 27-29). The compounds can be prepared into compositions that contain at least one compound of formula I and a solid or liquid carrier (see column 7 lines 45-48 and column 8 lines 1-34). The composition preferably contains 0.5% to 95% by weight of active ingredient (see column 1 lines 56-59). The compositions are generally diluted and supplied at a dose that ranges from 0.01 to 10kg a.i./ha (see column 9 lines 35-39). The composition can be applied to a plant, see, soil, or water in which a plant grows (see column 7 lines 60-64). The compositions can contain additional fungicides that have a synergistic effect of the pesticidal activity of the compound of formula I (see column 10 lines 42-50). Examples of additional fungicides include pencycuron (see column 11 line 19).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Pees et al. do not exemplify a composition containing a mixture of the instant triazolopyrimidine derivative of formula I and tridemorph in a weight ratio of 100:1 to 1:100. This deficiency is cured by the teachings of Seele et al.

Seele et al. teach a synergistic fungicidal mixture comprising a triazolmethyldiphenyloxyirane derivative and tridemorph (see the abstract). The fungicides are generally used in an amount of 0.1 to 95 wt% (see column 4 lines 30-34).

Finding of prima facie obviousness

Rational and Motivation (MPEP 2142-2143)

One of ordinary skill in the art would have been motivated to prepare a composition containing a mixture of the instant triazolopyrimidine derivative of formula I and tridemorph at a weight ratio of 100:1 to 1:100 because Pees et al. suggest a fungicidal mixture having synergistic properties comprising the instant triazolopyrimidine derivative of formula I in an amount of 0.05 to 95% by weight and tridemorph. Although Pees et al. do not teach the amount of tridemorph that can be used in the fungicidal mixture, it is already known in the art that tridemorph can be used in fungicidal composition in an amount of 0.1 to 95 wt% as suggested by Seele et al.

Thus, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to utilize the broad ratios cited in the instant claims because the amount of actives cited in both prior art references are similar and encompass a very broad amount of actives that can be used in the synergistic formulations. Furthermore, it would have been obvious due to process optimization, where one of ordinary skill in the art would vary the amount of each active used to obtain the most fungicidally effective composition.

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Conclusion

9. No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KRISTIE L. BROOKS whose telephone number is (571)272-9072. The examiner can normally be reached on M-F 8:30am-6:00pm Est..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KB

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616